

Focus on Access Methods

Many of us have at one time discussed our senses – sight, sound, taste, touch, and smell - and what it might be like if we were suddenly without one. We may have even covered our eyes with a blindfold to simulate the experience of a loss of vision, maybe a few of us have tried to go through part of the day using our less dominant hand; but, how many of us have tried to participate in daily, routine activities without the use of our upper or lower extremities? How would you get dressed? How would you dial your phone? How would you open the door? You might be thinking, while this would be challenging, I could still “ask” for help. So, what if, in addition to the loss of your ability to control your extremities, you lost the ability to speak?

Now think of an individual with a severe communication impairment who uses a communication device to talk. Before they can communicate a message, they must be able to access the language on their device. Access comes before language. It is a crucial aspect of using any AAC system, especially for someone who is physically challenged.

An access method (or selection method) is the way in which the user interacts with a device to control it for communication (Dowden & Cook, 2002). There are many types of access methods that are commonly organized into two broad categories: direct and indirect selection.

Direct Selection

Direct Selection is directly using a part of the body or tool to make a choice. On our telephone, we use our finger to directly select the numbers on the dial pad. In a geography lecture, the professor may use a light pointer to indicate an area on a large map. When using direct selection the individual is able to point to all possible message choices (symbols, words, letters, etc.) on their communication device. They can directly select using their fingers, hands, eyes, toes; or through the use of a pointing device such as a head pointer, mouthstick, beam of light, or pointing using eye gaze. Specific equipment may be required to accommodate the selection method. Some examples include using a joystick to navigate through the icons, a keyguard placed over the device screen to help steady direct selection with a finger, or a headmouse attached to the top of the device using your head essentially as a mouse.



using finger



using a head pointer



using eye gaze



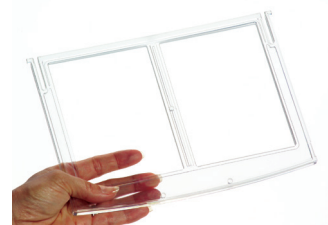
joystick



trackball mouse



headmouse

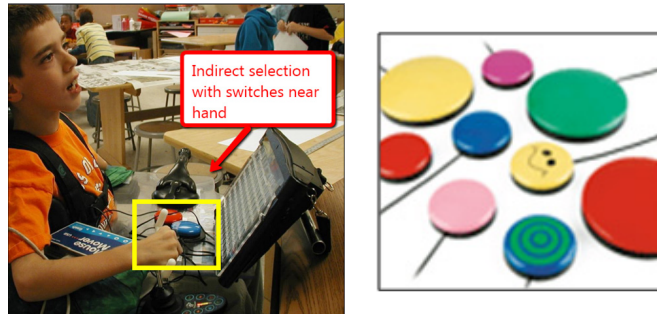


keyguard

Indirect selection

Some individuals do not have the physical skills to use direct selection. They may not be able to control their movements. Their movements may be too slow, inconsistent, or take too much effort. Indirect selection means that the person is not touching the device themselves. Instead, there are steps in between which allow them to make the selection (Cook A. M. & S. M. Hussey. 1995. *Assistive Technologies: Principles and Practice*. St. Louis, MO: Mosby-Year Book, Inc.).

Scanning is the most common type of indirect selection. Scanning involves the systematic presentation of a symbol (icon, letter, word, etc.) choice visually and/or auditorily to the user. The user selects the message by activating a switch (that may be located next to their head or hand for example) at the moment the cursor or indicator electronically highlights the desired word, letter or icon. Some examples of scanning techniques include a linear, row-column, group or directed scanning pattern. Customizing the scan pattern allows the individual to communicate more quickly, more clearly and with less work.



It is important to note that direct selection is always the preferred method of access whenever possible as it is faster and more efficient than indirect selection methods. Indirect selection methods require more attention, steps, or involvement from a communication partner. You may consider indirect selection methods if:

- The individual cannot use direct selection in any form at all
- Direct selection becomes more difficult in a particular physical position
- Direct selection becomes more difficult at a particular time of day

Downloaded Nov. 2012 from: http://depts.washington.edu/augcomm/02_features/02a_accessmethods.htm.

How do I know which access or selection method to use?

An access or selection method must be identified for those using a communication device. It should be identified based on the individual's abilities. Consider the following factors when determining the appropriate access method:

1. Can the individual make the selection by themselves?
2. How accurate is their selection?
3. How quickly can they make the selection?
4. Do they have the attention and cognitive skills necessary to use that selection method?
5. How hard do they have to work to make the selection?
6. Would they be able to use that method of selection through their entire day?
7. Would they be able to use that method of selection in a variety of positions in which they may be through their entire day?

Remember no matter how robust the language is on a communication device, if they cannot make selections, they will not be able to effectively use the vocabulary in the device. An easy, accurate, smooth and reliable access method is needed for people to do anything - including dialing a phone, opening a door or talking with a communication device.

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